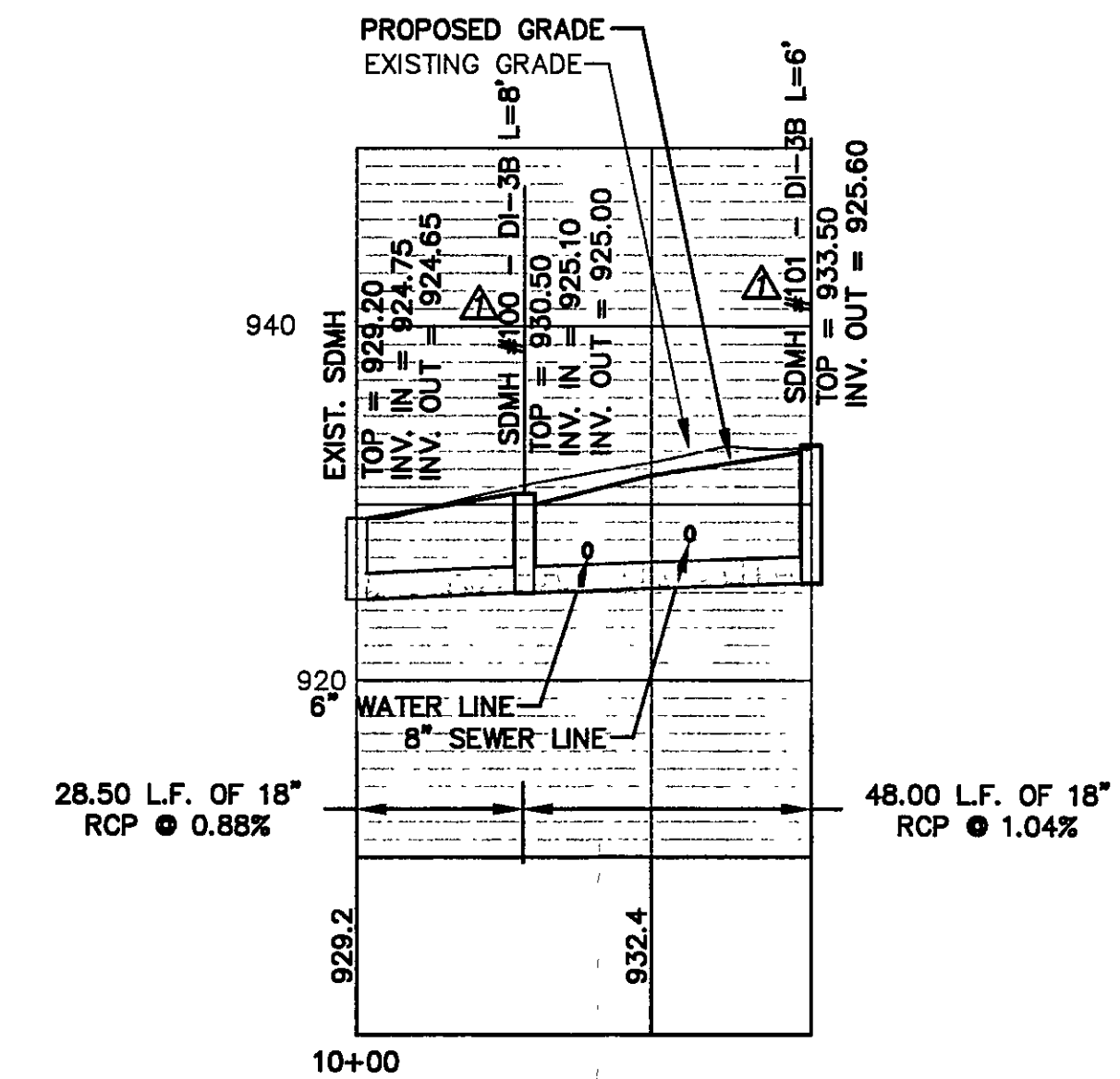
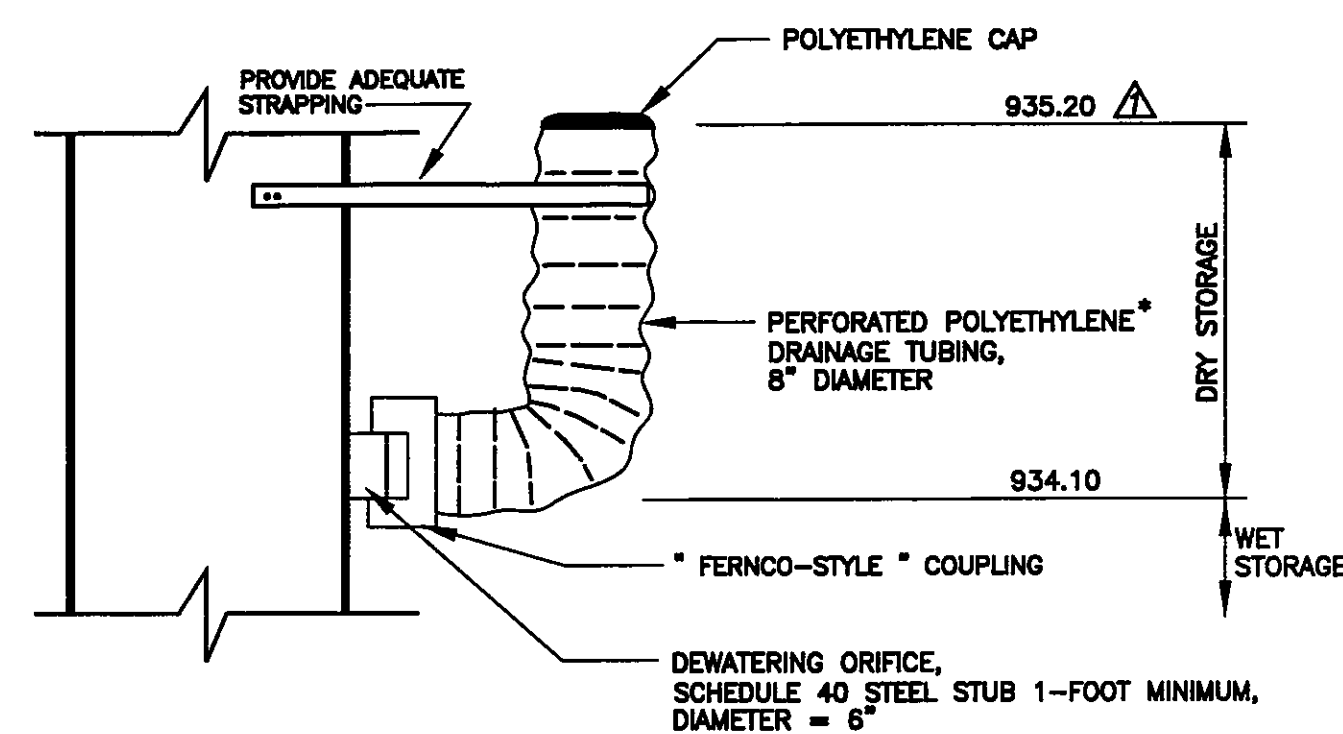


STORM SEWER PROFILE
200 SERIES
 HORIZ. SCALE: 1" = 30'
 VERT. SCALE: 1" = 10'



STORM SEWER PROFILE
100 SERIES
 HORIZ. SCALE: 1" = 30'
 VERT. SCALE: 1" = 10'



NOTE: WITH CONCRETE RISER, USE PVC SCHEDULE 40 STUB FOR DEWATERING ORIFICE
 *DRAINAGE TUBING SHALL COMPLY WITH ASTM F667 AND AASHTO M294

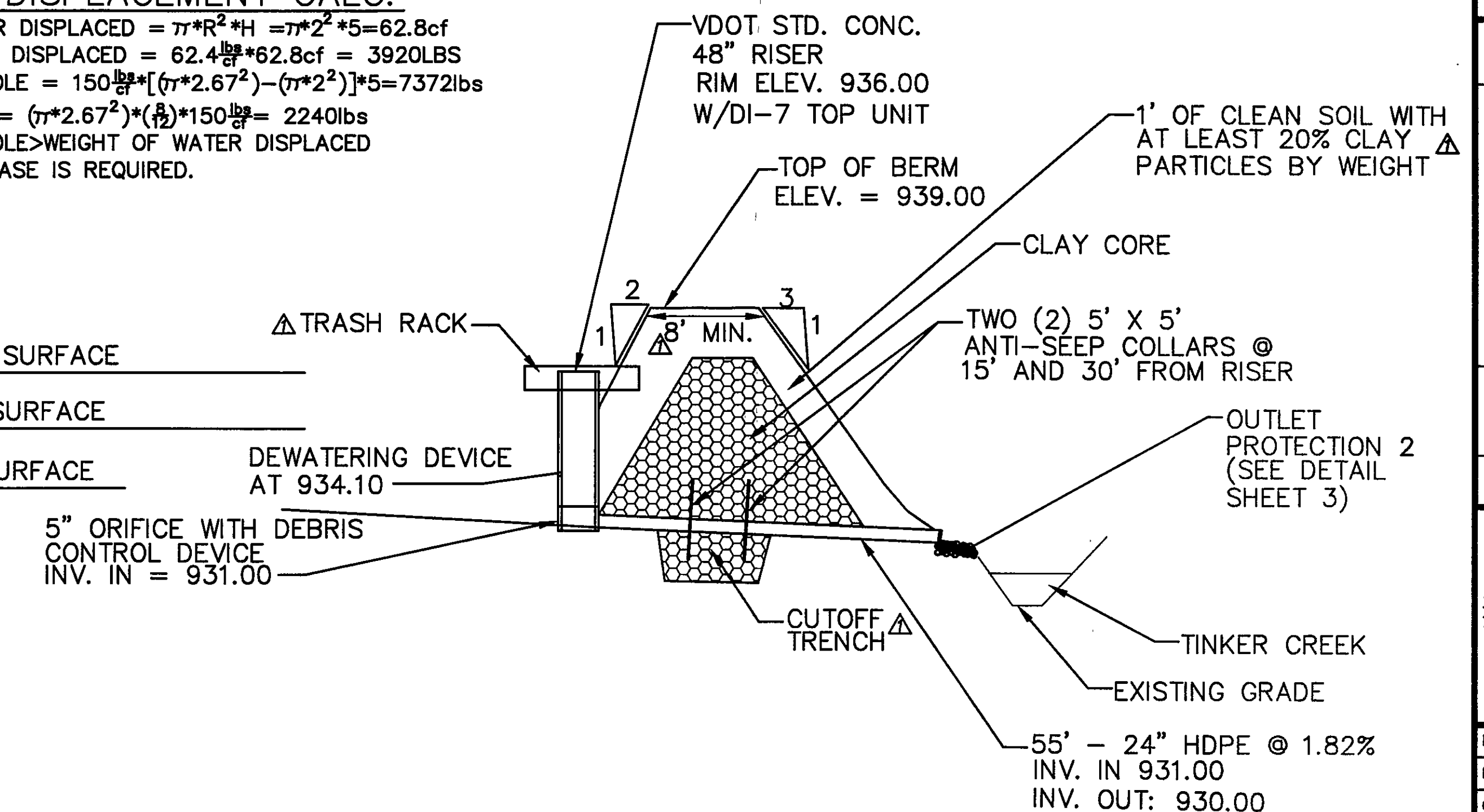
DEWATERING SYSTEM FOR SEDIMENT BASIN

NOTE:
 THE STORMWATER MANAGEMENT POND SHALL SERVE AS THE SEDIMENT CONTROL BASIN UNTIL FINAL STABILIZATION OF SIGHT IS ACHIEVED. ONCE THE CITY OF ROANOKE HAS DEEMED THE SIGHT STABILIZED, THE DEWATERING DEVICE AND TRASH RACK ARE TO BE REMOVED. THE CORRESPONDING ORIFICE FOR THE DEWATERING DEVICE IS TO BE PATCHED. THE 5 INCH ORIFICE IS TO BE DRILLED/UNPLUGGED AT ELEVATION 931.00, AND THE TRASH RACK IS TO BE REPLACED WITH THE DI-7 TOP UNIT AS SHOWN ON THIS DETAIL.

CONCRETE DISPLACEMENT CALC.

VOLUME OF WATER DISPLACED = $\pi R^2 H = \pi (2.5)^2 \times 5 = 62.8 \text{ cf}$
 WEIGHT OF WATER DISPLACED = $62.8 \text{ cf} \times 62.4 \text{ lb/cf} = 3920 \text{ lbs}$
 WEIGHT OF MANHOLE = $150 \text{ lbs} \times \left[\left(\frac{\pi}{4} \times 2.67^2 \right) - \left(\frac{\pi}{4} \times 2^2 \right) \right] \times 5 = 7372 \text{ lbs}$
 WEIGHT OF BASE = $\left(\frac{\pi}{4} \times 2.67^2 \right) \times \left(\frac{\pi}{4} \times 150 \right) \times 5 = 2240 \text{ lbs}$
 WEIGHT OF MANHOLE > WEIGHT OF WATER DISPLACED
 THEREFORE, NO BASE IS REQUIRED.

100 YR. WATER SURFACE
 ELEV. = 934.67
 10 YR. WATER SURFACE
 ELEV. = 934.04
 2 YR. WATER SURFACE
 ELEV. = 933.42



STORMWATER MANAGEMENT BASIN DETAIL
 NTS